Shaodong Wang

CONTACT INFORMATION

Nanjing University of Science and Technology
School of Mathematics and Statistics
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EMPLOYMENT

Nanjing University of Science and Technology

Associate Professor — 2023.06-present

Shanghai Jiao Tong University

Wu Wen-Tsun Assistant Professor — 2019.06-2023.05

EDUCATION

McGill University

Ph.D. in Mathematics — 2014.09-2019.05

- Dissertation Topic: Compactness and noncompactness of Yamabe-type problems on manifolds with boundary
- Advisors: Pengfei Guan and Jérôme Vétois

University of Science and Technology of China

B.S. in Mathematics — 2010.09-2014.06

RESEARCH INTERESTS

- Non-linear partial differential equations
- Geometric Analysis

PUBLICATIONS AND PREPRINTS

S. Almaraz and S. Wang, *A priori estimates for negative constant scalar curvature conformal metrics with positive constant boundary mean curvature.* To appear in J. London Math. Soc..

C. Liu, S. Wang and R. Zhuo, *A priori estimates for anti-symmetric solutions to a fractional Laplacian equation in a bounded domain.* Preprint on arXiv:2308.02245.

S. Almaraz and S. Wang, *A compactness theorem for conformal metrics with constant scalar curvature and constant boundary mean curvature in dimension three.* Calc. Var. Partial Differential Equations 64 (2025), no. 1, Paper No. 35.

S. Almaraz and S. Wang, *Energy bounds of sign-changing solutions to Yamabe equations on manifolds with boundary.* Nonlinear Anal. 225 (2022), Paper No. 113131.

C. Liu and S. Wang, *A necessary condition for prescribing mean curvature equations in* $\mathbb{B}^n$. Proc. Amer. Math. Soc. 150 (2022), no. 11, 4831–4839.

S. Almaraz, O. Queiroz and S. Wang, *A compactness theorem for scalar-flat metrics on 3-manifolds with boundary.* J. Funct. Anal. 277 (2019), no. 7, 2092–2116.

J. Vétois and S. Wang, *Infinitely many solutions for cubic nonlinear Schrödinger equations in dimension four.* Adv. Nonlinear Anal. 8 (2019), no. 1, 715–724.

S. Wang, *Infinitely many blowing-up solutions for Yamabe-type problems on manifolds with boundary.* Commun. Pure Appl. Anal. 17 (2018), no. 1, 209–230.

Academic Activities

Invited Talks

- *Workshop on Nonlinear PDEs XX*, Shanghai Jiao Tong University January 2024
- *CUHK/CUNY Compactness and Scalar Curvature Workshop*, CUHK/CUNY (Online) July 2023
- *International Conference on PDEs and Geometric Analysis*, Shanghai Jiao Tong University (Online) June 2022
- *PDE Seminar*, Chinese Academy of Sciences (Online) May 2022
- *Mathematics Seminar*, Wuhan University of Technology (Online) November 2021
- *International Conference on Geometric Analysis and PDEs*, Shanghai Jiao Tong University July 2021
- *Workshop on Nonlinear PDEs XI*, Shanghai Jiao Tong University March 2021
- *Nonlinear Evolutionary PDEs: Theories and Applications*, Shanghai Jiao Tong University (Online) December 2020
- *Workshop on Geometric Analysis*, Tongji University October 2019
- *Conference on Elliptic PDEs*, Fudan University November 2019
- *Geometric Analysis Seminar*, Nanjing University June 2019
- *Workshop on Nonlinear PDEs VII*, Shanghai Jiao Tong University June 2019
- *Differential Geometry Seminar*, University of Federal Fluminense October 2017
- *PDE Seminar*, University of Science and Technology of China June 2017
- *Geometric Analysis Seminar*, McGill University April 2017

Research Grants

- National Foreign Expert Project No. H20240846 2024-2025
- National Natural Science Foundation of China (NSFC) No.12001364 2021-2023

Teaching

At Nanjing University of Science and Technology

- Mathematical Analysis Fall 2024

At Shanghai Jiao Tong University

- MA247 Basic Calculus Fall 2020
- MA247 Basic Calculus Fall 2019